

CLAIMS

We claim:

1. A shutter member used in a cartridge having a case member,
the case member including a medium storage section for storing an
information medium having an information layer and a window section configured to
allow at least a head to be inserted, the head being used to perform a recording
operation or a reproduction operation for the information layer,
the shutter member comprising:
a base member operable to slide along a sidewall of the case member; and
a plate member engaged with the base member, which is operable to
open/close the window section of the case member in accordance with a sliding
motion of the base member,
wherein the base member and the plate member are engaged with each
other such that the plate member can be removed from the base member.
2. A shutter member according to claim 1, wherein:
the base member includes bearing sections,
the plate member includes rotary shafts, and
the base member and the plate member are engaged with each other by
inserting the rotary shafts of the plate member into the bearing sections of the base
member such that the plate member can be rotated with respect to the base
member.
3. A cartridge comprising a case member and a shutter member,
the case member including:
a medium storage section for storing an information medium having an
information layer; and

a window section configured to allow at least a head to be inserted, the head being used to perform a recording operation or a reproduction operation for the information layer,

the shutter member including:

a base member operable to slide along a sidewall of the case member; and

a plate member engaged with the base member, which is operable to open/close the window section of the case member in accordance with a sliding motion of the base member,

wherein the base member and the plate member are engaged with each other such that the plate member can be removed from the base member.

4. A cartridge according to claim 3, wherein:

the base member includes bearing sections,

the plate member includes rotary shafts, and

the base member and the plate member are engaged with each other by inserting the rotary shafts of the plate member into the bearing sections of the base member such that the plate member can be rotated with respect to the base member.

5. A cartridge according to claim 4, wherein:

the base member includes:

a sliding flat plate section having a predetermined length along a sliding direction in which the base member slides along the sidewall of the case member and a predetermined width along a direction perpendicular to the sliding direction; and

a sliding side plate section coupled to a side edge along the width direction of the sliding flat plate section, which has a cutout section at substantially the center along the length direction of the sliding flat plate section,

the plate member includes:

a window coverage section for covering the window section; and

an engaging protrusion section which protrudes from the window coverage section,

wherein the rotary shafts are provided to protrude from a pair of edge walls which are parallel to the sliding direction of the engaging protrusion section, and

the bearing sections are provided in the cutout section of the sliding side plate section.

6. A cartridge according to claim 5, wherein:

a pair of sliding side plate sections are coupled to the side edges in the width direction of the sliding flat plate section, and

each of the pair of sliding side plate sections includes the cutout section.

7. A cartridge according to claim 5, further comprising:

a shutter opener engaging section which engages with a shutter opener during the open operation of the shutter member,

wherein the cutout section of the sliding side plate section extends to the shutter opener engaging section.

8. A cartridge according to claim 5, wherein:

the rotary shaft has a shape including a pair of cut surfaces which is obtained by cutting the rotary shaft along the plane parallel to the window coverage section.

9. A cartridge according to claim 5, wherein:

the rotary shaft is provided to protrude from a rib of the engaging protrusion section.

10. A cartridge according to claim 5, wherein:

the window coverage section includes a sliding surface on which the case member slides, and

a mat finish having fine depressions and protrusions is provided on the sliding surface.

11. A cartridge according to claim 5, wherein:

near an edge of the window coverage section perpendicular to the sliding direction, within a predetermined width of the window coverage section, either a depression away from the sliding surface of the case member on which the window coverage section slides or a taper portion where the thickness is gradually smaller in a direction towards the edges is provided.

12. A cartridge according to claim 5, wherein:

the material for the base member has at least one of a higher sliding property and a higher glass transition point, compared to the material for the plate member.